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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/772,419	02/06/2004	Shunpei Yamazaki	740756-2712	2060
22204	7590	03/28/2008		
NIXON PEABODY, LLP 401 9TH STREET, NW SUITE 900 WASHINGTON, DC 20004-2128			EXAMINER OLSEN, ALLAN W	
			ART UNIT	PAPER NUMBER
			1792	
			MAIL DATE	DELIVERY MODE
			03/28/2008	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/772,419	<b>Applicant(s)</b> YAMAZAKI, SHUNPEI	
	<b>Examiner</b> Allan Olsen	<b>Art Unit</b> 1792	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 10 January 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,4-8,10-12 and 15-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,4-8,10-12 and 15-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 December 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                                   | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. _____  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>1/10/08</u> .   | 6) <input type="checkbox"/> Other: _____                                    |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 4-8, 9-12 and 15-20 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by US Patent 7,189,654 issued to Yamazaki et al. (hereinafter, Yamazaki '654).

The applied reference has a common assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

Yamazaki teaches a method of manufacturing display device comprising. Yamazaki teaches forming a conductive film over a substrate by ejecting liquid droplets containing conductive particles by using a first liquid droplet ejecting apparatus comprising a liquid droplet ejecting head provided with a plurality of liquid droplet ejecting nozzles arranged linearly (see, column 2, lines 19-50). Yamazaki teaches forming a resist pattern locally on the conductive film by using a second liquid droplet ejecting apparatus, comprising a liquid droplet ejecting head provided with a plurality of

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liquid droplet ejecting nozzles arranged linearly (see, for example, figure 9B). Yamazaki teaches forming a wiring by etching the conductive film with the resist pattern as a mask at an atmospheric pressure or a pressure close to the atmospheric pressure by using a first plasma generating device comprising a plurality of pairs of electrodes (see, for example figure 4B). Yamazaki '654 teaches using the same plasma device to ash the photoresist (see fig. 4C). Yamazaki '654 teaches forming a contact hole by etching at the atmospheric pressure or a pressure close to the atmospheric pressure by using a second plasma generating device provided with only a pair of electrodes. Yamazaki teaches the wiring may comprise, for example, Al, Ti, Ta, Mo and oxides of indium, tin and zinc (see, column 22, line 58). Yamazaki teaches a plasma generating device having cylindrical electrodes. Yamazaki teaches the insulating film may comprise silicon nitride or silicon oxide.

Claims 4, 7, 11, 16 and 19 are rejected under 35 U.S.C. 102(e) as being anticipated by US Patent Application Publication 2004/0224433.

The applied reference has a common assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

Yamazaki teaches a method of manufacturing display device comprising. Yamazaki teaches forming a conductive film over a substrate by ejecting liquid droplets containing conductive particles by using a first liquid droplet ejecting apparatus comprising a liquid droplet ejecting head provided with a plurality of liquid droplet

ejecting nozzles arranged linearly (see, for example, figure 9A). Yamazaki teaches forming a resist pattern locally on the conductive film by using a second liquid droplet ejecting apparatus, comprising a liquid droplet ejecting head provided with a plurality of liquid droplet ejecting nozzles arranged linearly (see, for example, figure 9B). Yamazaki teaches forming a wiring by etching the conductive film with the resist pattern as a mask at an atmospheric pressure or a pressure close to the atmospheric pressure by using a first plasma generating device comprising a plurality of pairs of electrodes (see, for example figure 9C and ¶ [0056]). Yamazaki teaches forming an insulating film (33) over the wiring and forming a contact hole (35) by etching the insulating film at the atmospheric pressure or a pressure close to the atmospheric pressure by using a second plasma generating device provided with only a pair of electrodes (see figures 11B and 11C, and ¶¶ [0065] -[0066]). Yamazaki teaches the wiring may comprise, for example, Al, Ti, Ta, Mo and oxides of indium, tin and zinc (see, for example, ¶¶ [0048], [0054], [0067], [0089]). Yamazaki teaches a plasma generating device having cylindrical electrodes (see, for example, figure 7). Yamazaki teaches the insulating film may comprise silicon nitride or silicon oxide (see for example, ¶¶ [0065] or [0072]).

### ***Response to Arguments***

Applicant's arguments filed January 10, 2007 have been fully considered. Applicant's arguments, see pages 7 and 8, with respect to independent claims 1 and 5 are persuasive. The previous Office action rejections of claims 1 and 5 and of all claims dependent therefrom have been withdrawn. Applicant's argument with respect to claim 4 is not persuasive.

Applicant argues that Yamazaki does not teach:

*“forming a contact hole by etching the insulating film at the atmospheric pressure or a pressure close to the atmospheric pressure by using a second plasma generating device provided with only a pair of electrodes.”*

Although figure 11B of Yamazaki depicts a plurality of electrode pairs, it also shows that the contact hole is formed by etching with plasma that is produced from only a single pair of electrodes.

### **Conclusion**

Applicant's submission of an information disclosure statement under 37 CFR 1.97(c) with the fee set forth in 37 CFR 1.17(p) on January 10, 2008 prompted the new ground of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 609.04(b). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Allan Olsen whose telephone number is 571-272-1441. The examiner can normally be reached on M, W and F: 1-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Parviz Hassanzadeh can be reached on 571-272-1435. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Allan Olsen/  
Primary Examiner, Art Unit 1792